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AUTHOR Halfacre, John D.; And Others
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ABSTRACT

This study investigated the effects of teaching the principles of behavior modification to students for use in the classroom. This intervention procedure involved four male high school students and their first-year psychology teacher. The students were instructed in behavior modification principles by two guidance counselors during group sessions. During the baseline period of the study, both the students and their classroom teacher rated each other on five selected problems behaviors. During the intervention period, students reinforced the teacher for desirable behavior, specifically when she allowed the class to participate in any discussion. Data collected by the students and teacners from this period and the follow-up period indicate that: (1) students can effectively reduce undesirable teacher behavior; and (2) concomitant changes in the students' undesirable behaviors can be effected. Data tables present the changes in student and teacher target behaviors as well as a comparison of the students' semester psychology grades. (SDH)

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Teaching Behavior Modification to Students: Effect Upon Student and Teacher Behavior

John D. Halfacre, Emelyn W. Cummins, Betty J. Thompson

CHARLESTON COUNTY SCHOOLS
Charleston, South Carolina

The effects of teaching the principles of behavior modification to students were investigated. Four high school psychology students were instructed in behavioral principles by two guidance counselors. The students were successful in modifying teacher behavior which they considered undesirable. Concomitant changes were also recorded in the students' social and academic behaviors.

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Teaching Behavior Modification to Students: Effect Upon Student and Teacher Behavior

There is a plethora of research supporting the efficiency of behavior modification techniques in the classroom. Success has been reported with (a) a number of target behaviors and (b) a variety of reinforcement techniques.

Winett and Winkles (1972) reviewed the Journal of Applied Behavior Analysis from 1968 to 1970. Their concern was for target behaviors in relatively normal classrooms. Examples of typical behaviors selected for modification were as follows: getting out of seat, crying, talking, running, looking in a book, and hand raising. Other investigators have focused on more academic behaviors (Nolen, Kunzelman, and Haring, 1967; Winett, Richards, and Krasner and Krasner, 1971; Lovitt and Curtiss, 1969). In their review of behavior modification in the classroom setting, Altman and Linton (1971) organized their summary according to the nature of the reinforcement procedure. Studies commonly employed one of the following: (a) teacher attention, (b) peer attention, (c) token reinforcement, and (d) vicarious reinforcement.

In reviewing the literature, it would appear that a pre-requisite for a successful program would be a "cooperative teacher"; that is, a teacher who is (1) willing to attempt and (2) proficient in, the application of behavioral principles. Several investigators have referred to the problem of gaining teacher cooperation. In the above mentioned review, Altman and Linton, (1971) discuss the difficulties which several researchers have encountered when working with classroom teachers. Hall (1971) mentioned the inability of teachers to generalize behavioral techniques. Although he may be successful when given a particular problem and an intervention procedure, the teacher may not be able to develop an additional plan for another problem behavior. Baker (1971) discussed the inability of professional educators to modify teacher behavior. She states that the research regarding how humans learn is largely ignored in the training of teachers.

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Since research supports the utility of behavioral techniques when applied by knowledgeable and cooperative individuals and since there is frequent teacher reluctance in the use of these procedures, the question is raised as to the efficacy of teaching the principles of behavior modification to students. The present study investigated the effect of teaching students these principles. Resultant changes in student and teacher behavior were examined.

METHOD

Subjects and Settings

A first-year psychology teacher in a middle class suburban secondary school approached two guidance counselors requesting help with four male students who were disrupting her class. Two of the boys were seniors; two were juniors. The teacher's initial contact with the counselors occurred toward the end of the first semester. The counselors responded by discussing with the teacher the possibility of implementing a behavior modification program to reduce the unacceptable behavior. The teacher reacted immediately and vehemently against such procedures in her classroom. After the teacher's refusal to consider an intervention program for her classroom, the counselors agreed to the teacher's request to involve the four students in "group therapy." The experimental procedures were begun at the beginning of the second semester. Data were collected for the remainder of the school year.

Baseline (Student Behavior)

Before beginning the "therapy" sessions, the counselors succeeded in getting the teacher to pinpoint the following unacceptable student behaviors: (a) talking to the point of being "called down," (b) making funny side comments, (c) asking to be excused (restroom), (d) laughing aloud for no reason, and (e) asking to go home because of sickness. The rationale for obtaining baseline data was explained to

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the teacher, and she agreed to the following measurement procedure. Each day, at the end of her class, she completed an index card as shown in Figure 1. If, during the class, the student exhibited any of the target behaviors, then a check was placed underneath that behavior. The teacher's evaluation was not the daily frequency of occurrence, but whether or not the behavior occurred. The counselors collected the measurements at the end of each day. Summary data indicating the results of the baseline and other phases of the experiment are shown in Figure 3.

Baseline (Teacher Behavior)

On the sixth day after the teacher had begun baseline measurement, the initial meeting occurred between the two counselors and the four students. The counselors discussed the teacher's concern for the students' behavior and showed them the accumulated data. The students reacted by talking about their dislike for the teacher. The following undesirable teacher behaviors were identified: (a) getting mad when we say funny things, (b) making smart remarks, (c) no class discussion, (d) showing favoritism, and (e) talking to us as if we were children. The students agreed to a seven-day rating period for the teacher's undesirable behavior. Figure 2 illustrates the card which each of the students individually completed at the end of the class. The counselors collected the data each day. The students were instructed to "act your same way" during the seven-day period. Since the teacher was continuing her daily data collection, any effect of data-taking by the students upon their own behavior could be observed. From the thirteenth day to the conclusion of the experiment, neither the students nor the teacher were aware that each was rating the other.

Intervention

On the thirteenth day of the experiment, a second meeting between the counselors and students was held. The goal of this session was to teach the students the basic principles of behavior modification. Following is an outline of

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the counselors' presentation:

A. When a person does something, the probability of their doing it again is determined by what happens after they do it.

B. There are three things that can happen after a behavior occurs:

(1) nothing

(2) something good

(3) something bad

C. "Good" and "bad" are determined by their effect upon behavior. (Different strokes for different folks).

D. Shaping - Make "something good" happen to the teacher whenever she makes any small change toward desirable behavior.

After an informal discussion about these basic principles, the students were asked to select from the five undesirable teacher behaviors the one which most annoyed them. They chose "C" - no class discussion. The counselors suggested that the students should "make something good" happen to the teacher whenever she allowed the class to participate in any discussion. The students decided that "something good" would be their (a) paying attention to the teacher, (b) participating seriously in the class discussion, and (c) giving her individual verbal approval after class.

The intervention phase consisted of two counselor-student meetings per week for a period of twenty school days. Each session consisted of an initial review of the basic principles, a review of the cumulated data on teacher behavior, and a discussion of any specific intervention changes.

Follow-up

The follow-up phase extended from day 36 of the experiment to day 90 (the last regular school day of the year.) During this period the students and the teacher were asked to rate target behaviors on one randomly selected day each week. The

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counselors informed the subjects on the day of the desired rating. No additional formal meetings were held between the students and the counselors.

RESULTS

Figure 3 shows the frequency of student and teacher undesirable behavior during the three phases of the experiment. In order to summarize the results of the data, a SUB Index (student undesirable behavior) and a TUB Index (teacher undesirable behavior) were devised for each phase. These indexes were computed by dividing the actual number of undesirable behavior items checked daily by the total possible numbers of items which could have been checked. A summary of the SUB and TUB Indexes for each phase is presented in Table 1. Results indicating changes in specific target behaviors by the teachers and by individual students are shown in Tables 2 and 3.

At no time were grades or achievement discussed with the students. Since the intervention began very early during the second semester of the school year, psychology grades for the two semester grading periods could be compared. These results are summarized in Table 4.

DISCUSSION

The principle findings of this study are two-fold: First, when applying principles of behavior modification, students can efficiently reduce undesirable teacher behavior. Second, concomitant changes in the students' undesirable behaviors can be effected.

Emphasis in behavioral principles in the classroom now appears to be, not upon the validity of the techniques, but upon the effectiveness which they can be communicated to groups of typical classroom teachers. Quesenbery (1973) found that even with the use of teacher incentives (clerical help, release time, cash, etc.) an average of only 62% of four school faculties agreed to participate in a series

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of classroom management workshops. Of these 62% who volunteered to attend workshops, 39% dropped out before completion.

Teacher reluctance to learn and to implement behavior modification programs is obviously a factor to be considered. Future research undoubtedly will focus on behavioral characteristics of "reluctant teachers" and differential methodology for communicating classroom management procedures. Until such information is available, a possible alternative would be to teach students principles with which they might alter teacher behavior.

In addition, implications are also present for the following: teaching students behavioral principles to improve family relationships, teaching students behavioral techniques by their teachers as a regular part of their school curriculum, and teaching students how to consult with their peers regarding their (peers) problems.

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DAY 1

	A	B	C	D	E
STUDENT 1					
STUDENT 2					
STUDENT 3					
STUDENT 4					

A. Called Down For Talking In Class

B. Being Funny

C. Asking To Be Excused

D. Laughing Aloud In Class For No Reason

E. Wanting To Go To The Office Because Sick

FIGURE I

TEACHER RATING SHEET OF STUDENT UNDESIRABLE BEHAVIOR

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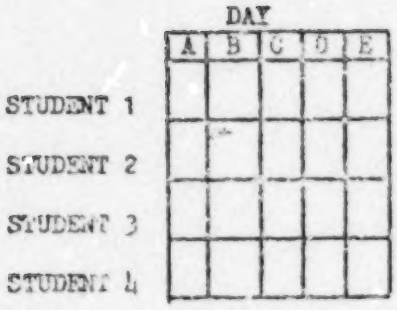

A. Getting Mad When We Say Funny Things

B. Making Smart Remarks

C. No Discussion

D. Showing Favoritism

E. Talking To Us As If We Were Children

FIGURE 2

STUDENT RATING SHEET OF TEACHER UNDESIRABLE BEHAVIOR

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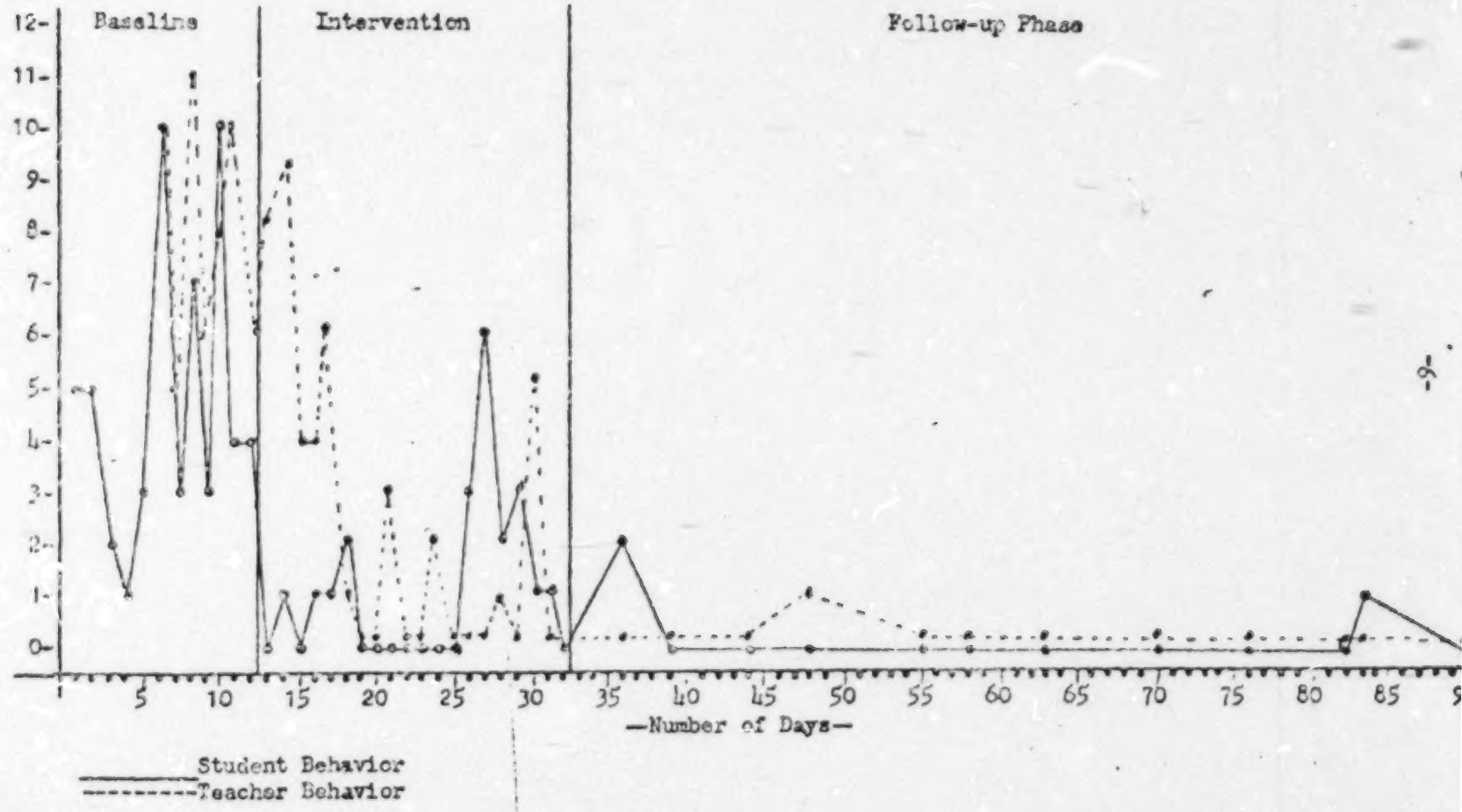

Figure 3
Frequency of Teacher and Student Undesirable Behavior

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TABLE 1

Summary of SUB and TUB Indexes

TUB Index (Teacher Undesirable Behavior Index)

A.	Baseline TUB Index:	40.0%
B.	Intervention TUB Index:	10.8%
C.	Follow-up TUB Index:	0.4%

SUB Index (Student Undesirable Behavior Index)

A.	Baseline SUB Index:	23.8%
B.	Intervention SUB Index:	5.3%
C.	Follow-up SUB Index:	1.3%

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TABLE 2

Teacher Undesirable Behavior

TUB Index by Items

A. Getting Mad When We Say Funny Things

1.	Baseline Phase:	35.7%
2.	Intervention Phase:	9.5%
3.	Follow-up Phase:	0.0%

B. Making Smart Remarks

1.	Baseline Phase:	60.7%
2.	Intervention Phase:	13.1%
3.	Follow-up Phase:	0.0%

C. No Discussion

1.	Baseline Phase:	42.9%
2.	Intervention Phase:	9.5%
3.	Follow-up Phase:	0.0%

D. Showing Favoritism

1.	Baseline Phase:	21.4%
2.	Intervention Phase:	10.7%
3.	Follow-up Phase:	2.1%

E. Talking To Us As If We Were Children

1.	Baseline Phase:	39.3%
2.	Intervention Phase:	8.3%
3.	Follow-up Phase:	0.0%

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TABLE 3

Student Undesirable Behavior

SUB Index by Items

A. Called Down For Talking In Class

1. Baseline Phase:	45.8%
2. Intervention Phase:	11.3%
3. Follow-up Phase:	2.1%

B. Being Funny

1. Baseline Phase:	37.5%
2. Intervention Phase:	10.0%
3. Follow-up Phase:	2.1%

C. Asking To Be Excused

1. Baseline Phase:	10.4%
2. Intervention Phase:	0.0%
3. Follow-up Phase:	0.0%

D. Laughing Aloud In Class For No Reason

1. Baseline Phase:	18.8%
2. Intervention Phase:	5.0%
3. Follow-up Phase:	0.0%

E. Wanting To Go To the Office Because Sick

1. Baseline Phase:	6.3%
2. Intervention Phase:	0.0%
3. Follow-up Phase:	2.1%

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TABLE 4

Difference Between First and Second
Semester Psychology Grades

Student	Point Change
1	up 7
2	up 12
3	up 205
4	up 12

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